Docket No.: 1599-0299PUS1

## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A new carbonated candy-type vitamin preparation emprising which consists essentially of at least one vitamin selected from the group consisting of fat-soluble vitamins and water soluble vitamins, sucrose and; starch syrup(maltose syrup), sodium bicarbonate; and carbon dioxide, wherein the carbonated candy-type vitamin preparation is manufactured by

1) dissolving, suspending or emulsifying <u>vitamin</u>, sucrose, <u>and</u> starch syrup(maltose syrup) and other ingredients, except carbon dioxide and sodium bicarbonate in a suitable amount of water and the mixture is heated rapidly to obtain a molten mass;

- 2) concentrating the molten mass to about 1-3 parts by weight of water;
- 3) transferring the concentrated molten mass to a pre-heated autoclave where color, essence and sodium bicarbonate are added by rapid stirring and carbon dioxide gas is injected by rapid stirring to disperse the carbon dioxide bubbles under high pressure;
- 4) introducing the molten carbon-dioxide-gasified mass into a suitable tube or candy-type mold;
- 5) cooling the tube or mold injected with molten carbon-dioxide-gasified mass to or below 15°C;
- 6) removing the cooled, carbonated candy-type mass and crushing it below 20°C, and below 40% of RH;
  - 7) passing the crushed carbonated mass through a standard sieve; and
- 8) sealing the carbonated candy-type mass or the sieved crushed carbonated mass in a hermetic package.

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2. (Previously Presented) The carbonated candy-type vitamin preparation of claim 1

wherein the at least one vitamin is selected from the group consisting of vitamin A<sub>1</sub>(retinol),

vitamin A<sub>2</sub>(3-dehydroretinol), vitamin A<sub>3</sub>, vitamin D<sub>2</sub>(ergocalciferol), vitamin

 $D_3$  (cholecal feferol), provitamin  $D_2$  (ergosterin), provitamin  $D_3$  (dehydrocholesterol), vitamin  $E(\alpha$ -

tocopherol,  $\beta$ -tocopherol,  $\gamma$ -tocopherol,  $\delta$ -tocopherol), vitamin F(linoleic acid, linolenic acid),

vitamin K<sub>1</sub>, vitamin K<sub>2</sub>, vitamin U, vitamin B<sub>1</sub>(thiamine), vitamin B<sub>2</sub>(riboflavin), vitamin

B<sub>6</sub>(pyridoxin), nicotinamide, nicotinic acid, pantothenic acid, vitamin H(biotin), folic acid,

vitamin B<sub>12</sub>(cyanocobalamin), choline, inositol, vitamin L<sub>1</sub>(anthranilic acid), vitamin L<sub>2</sub>(5'-

thiomethyladenosine), vitamin B<sub>13</sub>(orotic acid), and vitamin C(ascorbic acid).

3. (Previously Presented) A process for the preparation of a new carbonated candy-type

vitamin preparation comprising at least one vitamin selected from the group consisting of fat-

soluble vitamins and water soluble vitamins, sucrose and; starch syrup(maltose syrup), sodium

bicarbonate; and carbon dioxide, wherein the carbonated candy-type vitamin preparation is

manufactured by

1) dissolving, suspending or emulsifying sucrose, starch syrup(maltose syrup) and other

ingredients, except carbon dioxide and sodium bicarbonate in a suitable amount of water and the

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mixture is heated rapidly to obtain a molten mass;

2) concentrating the molten mass to about 1-3 parts by weight of water;

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3) transferring the concentrated molten mass to a pre-heated autoclave where color, essence

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and sodium bicarbonate are added by rapid stirring and carbon dioxide gas is injected by rapid

stirring to disperse the carbon dioxide bubbles under high pressure;

4) introducing the molten carbon-dioxide-gasified mass into a suitable tube or candy-type

mold;

5) cooling the tube or mold injected with molten carbon-dioxide-gasified mass to or below

15°C;

6) removing the cooled, carbonated candy-type mass and crushing it below 20°C, and below

40% of RH;

7) passing the crushed carbonated mass through a standard sieve; and

8) sealing the carbonated candy-type mass or the sieved crushed carbonated mass in a

hermetic package.

4. (Previously Presented) The process for the preparation of a new carbonated candy-type

vitamin preparation of claim 3, wherein the at least one vitamin is selected from the group

consisting of vitamin A<sub>1</sub>(retinol), vitamin A<sub>2</sub>(3-dehydroretinol), vitamin A<sub>3</sub>, vitamin

D<sub>2</sub>(ergocalciferol), vitamin D<sub>3</sub>(cholecalfeferol), provitamin D<sub>2</sub>(ergosterin), provitamin

 $D_3$ (dehydrocholesterol), vitamin  $E(\alpha$ -tocopherol, β-tocopherol, γ-tocopherol),

vitamin F(linoleic acid, linolenic acid), vitamin K<sub>1</sub>, vitamin K<sub>2</sub>, vitamin U, vitamin B<sub>1</sub>(thiamine),

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vitamin B<sub>2</sub>(riboflavin), vitamin B<sub>6</sub>(pyridoxin), nicotinamide, nicotinic acid, pantothenic acid,

vitamin H(biotin), folic acid, vitamin B<sub>12</sub>(cyanocobalamin), choline, inositol, vitamin

 $L_1$ (anthranilic acid), vitamin  $L_2$ (5'-thiomethyladenosine), vitamin  $B_{13}$ (orotic acid), and vitamin

C(ascorbic acid).

5. (Previously Presented) A new carbonated candy-type vitamin preparation of claim 1,

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additionally comprising at least one ingredient selected from the group consisting of trace

inorganic compounds, amino-acids, organic acids and other ingredients necessary to the human

being.

6. (Previously Presented) A new carbonated candy-type vitamin preparation of claim 1.

additionally comprising at least one ingredient selected from the group consisting of glycine,

alanine, valine, leucine, isoleucine, serine, threonine, cysteine, methionine, asparaginic acid,

glutaminic acid, lysine, arginine, phenylalanine, tyrosine, histidine, tryptophane, proline,

oxyproline, lactose, fructose, glucose, K1, MgO, Cu<sub>2</sub>O, ZnSO<sub>4</sub>, MnSO<sub>4</sub>, CaHPO<sub>4</sub>, KCl, dried

yeast (yeast containing Cr, yeast containing Se, yeast containing Mo) . precipitated calcium

carbonate, pomegranate extract, collagen, chitosan, green tea extract, Ginseng Radix extract,

Acanthopanacis Cortex extract, onion extract, malic acid, citric acid, tartaric acid, fumaric acid,

maleic acid and acetic acid.

7. (Previously Presented) A process for the preparation of a new carbonated candy-type

vitamin preparation of claim 5 additionally comprising at least one ingredient selected from the

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group consisting of trace inorganic compounds, amino acids, oretanic acids and other

ingredients necessary for the human being.

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tartaric acid, fumaric acid, maleic acid and acetic acid.

8. (Previously Presented) A process for the preparation of a new carbonated candy-type vitamin preparation of claim 5 additionally comprising at least one ingredient selected from the group consisting of glycine, alanine, valine, leucine, isoleucine, serine, threonine, cysteine, methionine, asparaginic acid, glutamic acid lysine, arginine, phenylalanine, tyrosine, histidine, typrotphane, proline, oxyproline, lactose, fructose, glucose, Kl, MgO, Cu<sub>2</sub>O, ZnSO<sub>4</sub>, MnSO<sub>4</sub>, CaHPO<sub>4</sub>,, KCl, dried yeast (yeast containing Cr, yeast containing Se, yeast containing Mo). precipitated calcium carbonate, pomegranate extract, collagen, chitosan, green tea extract, Ginseng Radix extract, Acanthopanacis Cortex extract, onion extract, malic acid, citric acid,